[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0338; Project Identifier AD-2020-01423-T; Amendment 39-21820; AD 2021-23-21]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 and 787-9 airplanes. This AD was prompted by reports that shimming requirements were not met during the assembly of certain structural joints, which can result in reduced fatigue thresholds and cracking of the affected structural joints. This AD requires repetitive inspections for cracking of certain areas of the aft wheel well bulkhead (AWWB) body chord and AWWB side fitting and failsafe straps, and repair of any cracking found. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone

562-797-1717; Internet https://www.myboeingfleet.com. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0338.

Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0338; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: Greg.Rutar@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 787-8 and 787-9 airplanes. The NPRM published in the *Federal Register* on May 10, 2021 (86 FR 24778). The NPRM was prompted by reports that shimming requirements were not met during the assembly of certain structural joints, which can result in reduced fatigue thresholds and cracking of the affected structural joints. In the NPRM, the FAA proposed to require repetitive inspections for cracking of certain areas of the AWWB body chord and AWWB side fitting and failsafe straps, and repair of any cracking found. The FAA is

issuing this AD to address undetected fatigue cracking, which could weaken primary structure so it cannot sustain limit load, and could result in reduced structural integrity of the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from United Airlines who supported the NPRM without change.

The FAA received additional comments from two commenters, including Avianca Airlines (AVA) and Boeing. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Use Alternative Repair Method

AVA asked that the FAA change the following language used in paragraph (h)(3) of the proposed AD "This AD requires doing the repair using a method approved in accordance with the procedures specified in paragraph (i) of this AD." AVA stated that this means submitting a request for an alternative method of compliance (AMOC) is required in accordance with paragraph (i)(3) of the proposed AD. AVA added that the proposed repair is based on the time delay required to obtain an AMOC letter, which affects the operational return to service of the affected aircraft, and noted that a Form 8100-9 is already an approved document that certifies compliance with the airworthiness standard. AVA proposed that only an 8100-9 approval form be required for doing a repair after contacting Boeing.

The FAA does not agree with the commenter's request. An FAA Form 8100-9, which is both a repair data approval and AMOC approval, may be issued by the Boeing Company Organization Designation Authorization (ODA), provided it has been

authorized by the Manager, Seattle ACO Branch, FAA, as required by paragraph (i)(3) of this AD. Therefore, the FAA has not changed this AD in this regard.

Request to Use Later Revision of the Service Information

AVA asked that the FAA include a paragraph in the proposed AD that approves any further revision or issue of Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue 001, both dated September 8, 2020, for compliance with the proposed AD.

The FAA does not agree with the commenter's request. The FAA may not in an AD refer to any document that does not yet exist. In general terms, the FAA is required by Office of the Federal Register (OFR) regulations for approval of materials incorporated by reference, as specified in 1 CFR 51.1(f), to either publish the service document contents as part of the actual AD language; or submit the service document to the OFR for approval as referenced material, in which case the FAA may only refer to such material in the text of an AD. The AD may refer to the service document only if the OFR approved it for incorporation by reference. See 1 CFR part 51.

To allow operators to use later revisions of the referenced document (issued after publication of the AD), either the FAA must revise the AD to reference specific later revisions, or operators must request approval to use later revisions as an alternative method of compliance with this AD under the provisions of paragraph (i) of this AD.

Request to Clarify Applicability

Boeing asked that the applicability specified in paragraph (c) of the proposed AD be clarified, as follows: "This AD applies to The Boeing Company Model 787-8 and 787-9 airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue

001, both dated September 8, 2020." Boeing stated that, although the applicability is the same in each bulletin, identifying both will avoid confusion for operators.

The FAA agrees with the commenter for the reason provided. Paragraph (c) of this AD only identifies Boeing Alert Requirements Bulletin B787-81205-SB530077-00 RB, Issue 001, dated September 8, 2020; therefore, the FAA has changed paragraph (c) of this AD to identify both bulletins, as requested by the commenter.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin B787-81205-SB530077-00 RB, Issue 001, dated September 8, 2020. The service information describes procedures for repetitive high frequency eddy current (HFEC) inspections for cracking of the forward edge of the AWWB side fitting and failsafe strap at station (STA) 1209 on the left and right side, and the AWWB side fitting outer chord surface and failsafe strap, and repair of any cracking found.

The FAA reviewed Boeing Alert Requirements Bulletin B787-81205-SB530078-00 RB, Issue 001, dated September 8, 2020. The service information describes procedures for repetitive HFEC inspections for cracking of the forward edge of the horizontal flange of the AWWB body chord and around all the fastener heads and vertical beam clips common to the AWWB body chord horizontal flange.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 79 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Repetitive inspections	16 work-hours X $85 per hour = $1,360 per inspection cycle	$0	$1,360 per inspection cycle	$107,440 per inspection cycle

The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-23-21 The Boeing Company: Amendment 39-21820; Docket No. FAA-2021-0338; Project Identifier AD-2020-01423-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 787-8 and 787-9 airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue 001, both dated September 8, 2020.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports that shimming requirements were not met during the assembly of certain aft wheel well bulkhead (AWWB) structural joints, which can result in reduced fatigue thresholds and cracking of the affected structural joints. The FAA is issuing this AD to address undetected fatigue cracking, which could weaken primary structure so it cannot sustain limit load, and could result in reduced structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Except as specified by paragraph (h) of this AD: At the applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue 001, both dated September 8, 2020, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue 001, both dated September 8, 2020.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletins B787-81205-SB530077-00 and

B787-81205-SB530078-00, both Issue 001, both dated September 8, 2020, which are referred to in Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue 001, both dated September 8, 2020.

(h) Exceptions to Service Information Specifications

(1) Where Boeing Alert Requirements Bulletin B787-81205-SB530077-00 RB, Issue 001, dated September 8, 2020, uses the phrase "the issue 001 date of the Requirements Bulletin B787-81205-SB530077-00 RB," this AD requires using "the effective date of this AD."

(2) Where Boeing Alert Requirements Bulletin B787-81205-SB530078-00 RB, Issue 001, dated September 8, 2020, uses the phrase "the issue 001 date of the Requirements Bulletin B787-81205-SB530078-00 RB," this AD requires using "the effective date of this AD."

(3) Where Boeing Alert Requirements Bulletins B787-81205-SB530077-00 RB and B787-81205-SB530078-00 RB, both Issue 001, both dated September 8, 2020, specify contacting Boeing for repair instructions: This AD requires doing the repair using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(j) Related Information

For more information about this AD, contact Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: Greg.Rutar@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Requirements Bulletin B787-81205-SB530077-00 RB, Issue 001, dated September 8, 2020.

(ii) Boeing Alert Requirements Bulletin B787-81205-SB530078-00 RB, Issue 001, dated September 8, 2020.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd.,

MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, fr.inspection@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on November 5, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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